

CLAIMS

1. A circuit comprising:

a buffer for storing a plurality of data packets; and

a test circuit configured to (i) monitor a number of said plurality of data packets in said buffer, (ii) permit an additional data packet to said plurality of data packets into said buffer responsive to said number being less than a first threshold, and (iii) discard said additional data packet in accordance with a probabilistic test responsive to said number being greater than said first threshold.

2. The circuit according to claim 1, wherein said test circuit is further configured to discard said additional data packet in response to said number being at least as great as a second threshold.

3. The circuit according to claim 1, wherein said test circuit is further configured to present an identification signal identifying said additional data packet as discarded.

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4. The circuit according to claim 1, wherein said test circuit is further configured to present a rate signal in a first condition in response to said number being greater than said first threshold.

5. The circuit according to claim 4, wherein said test circuit is further configured to present said rate signal in a second condition in response to said number being less than said first threshold.

6. The circuit according to claim 1, wherein said probabilistic test is based upon a precedence.

7. The circuit according to claim 1, wherein said probabilistic test is based upon a priority.

8. The circuit according to claim 1, wherein said probabilistic test is based upon a volume rate.

9. The circuit according to claim 1, wherein said number is a time average of said data packets in said buffer.

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10. The circuit according to claim 9, wherein said test circuit is further configured to (i) discard said additional data packet in response to said number being at least as great as a second threshold, (ii) present an identification signal identifying said additional data packet as discarded, (iii) present a rate
5 signal in a first condition in response to said number being greater than said first threshold, and (iv) present said rate signal in a second condition in response to said number being less than said first threshold.

11. A method for managing congestion of a plurality of data packets in a buffer, comprising the steps of:

(A) monitoring a number of said plurality of data packets in said buffer;

(B) permitting an additional data packet to said plurality of data packets into said buffer in response to said number being less than a first threshold; and
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(C) discarding said additional data packet in accordance with a probabilistic test in response to said number being greater
10 than said first threshold.

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12. The method according to claim 11, further comprising the step of:

discarding said additional data packet in response to said number being at least as great as a second threshold.

13. The method according to claim 11, further comprising the step of:

presenting an identification signal identifying said additional data packet as discarded.

14. The method according to claim 11, further comprising the step of:

presenting a rate signal in a first condition in response to said number being greater than said first threshold.

15. The method according to claim 14, further comprising the step of:

presenting said rate signal in a second condition in response to said number being less than said first threshold.

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16. The method according to claim 11, further comprising the step of:

- time averaging said number prior to step (B).

17. A circuit comprising:

means for monitoring a number of said plurality of data packets in said buffer;

means for permitting an additional data packet to said plurality of data packets into said buffer in response to said number being less than a first threshold; and

means for discarding said additional data packet in accordance with a probabilistic test in response to said number being greater than said first threshold.